



U.S. Department of Energy
Energy Efficiency
and Renewable Energy



Clean Cities International Coalition Development

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U.S. – Mexico Propane Workshop

November 7, 2003

Mexico City



U.S. Clean Cities Program – Celebrating a Decade of Drive

- **Currently 81 Active Coalitions promoting the use of alternative fuels in the transportation sector**
- **151,000 AFVs/6,000+ AFV stations**
- **4,400+ Stakeholders**
- **181M gals of petrol. displaced per year**
- **32,000 metric tons of emissions reduced per year**
- **Clean Cities Coalitions cover 58% of U.S. Population . . .**

Designated Coalitions



Goals – 1 million AFVs using 1 billion gallons of alternative fuels and 75% of coalitions self-sustaining by 2010



Propane Trends in the Clean Cities

- Shift away from conversions - need more OEM products
 - Result of environmental regulations affecting conversion kits
 - 1 model of light-duty propane vehicle available from manufactures in model year 2004
- New propane school bus platform
- 19% of AFVs in the Clean Cities are propane
 - 2% growth 2001-2002
 - Schwan's 7,000 propane trucks; stakeholder in many CC coalitions
- 33% of AFV refueling stations are propane





Lessons Learned from Clean Cities

- Incentives to encourage purchases are key
- Active fuel suppliers are necessary and **should work together**
- Drivers & mechanics must be educated to allay safety concerns
- Customers must be vocal about what they want in terms of vehicle types
- Coalitions are important: need strong coordinator
- Niche markets are a must
- Poor technology must be avoided



Benefits to forming a coalition

1. Credibility by having a diverse group of stakeholders striving for the same goal;
2. Viability by not being subject to changes in government leadership;
3. Ability to provide a greater role by being able to educate elected officials; and
4. Reliability by providing manufacturers and equipment suppliers a commitment that a market will built.



Clean Cities International Program

GOAL: Facilitate exchange of information on the use of alternatives to petroleum fuel in the transport sector and ensure safety and effectiveness of alternative fuel vehicle programs.

ACTIVITIES:

- Information Exchange
- Training for Technicians
- Coalition Formation
- Trade Missions and Technology Tours





Clean Cities International Mexico

- Reverse Trade Mission (11/02)
- Scoping Mission (4/03)
- CC Program Plan Received from Mexico City (10/03)
- Proposal submitted to Inter-American Development Bank for Training (10/03)
- Limited CCI funding for Plan Development (FY04)



- CCI Co-sponsorship of Autogas Forum (11/03)



Clean Cities Border Program

- **Paso del Norte**
 - Designated in 1995
 - 3,310 LPG Vehicles 45 LPG refueling sites
 - Borders Juarez, Mexico
- **Lower Rio Grande Valley**
 - Approved for Designation
 - 266 LPG Vehicles
 - 16 LPG stations
- **Laredo/Nuevo Laredo**
 - Working towards Designation
 - 203 LPG Vehicles
 - 1 LPG station





Clean Cities International Roadmap

- For communities outside the U.S. interested in joining the international network
- Guides development of local AFV markets, giving the AFV industry confidence to enter the market
- Members must provide U.S. alternative fuel industry suppliers and manufacturers the opportunity to market their products
- Membership does not guarantee funding
- Members are eligible for assistance
 - Help to identify and secure funding from multinational donors
 - Technical assistance



6 Stops on the Road to Clean Cities!

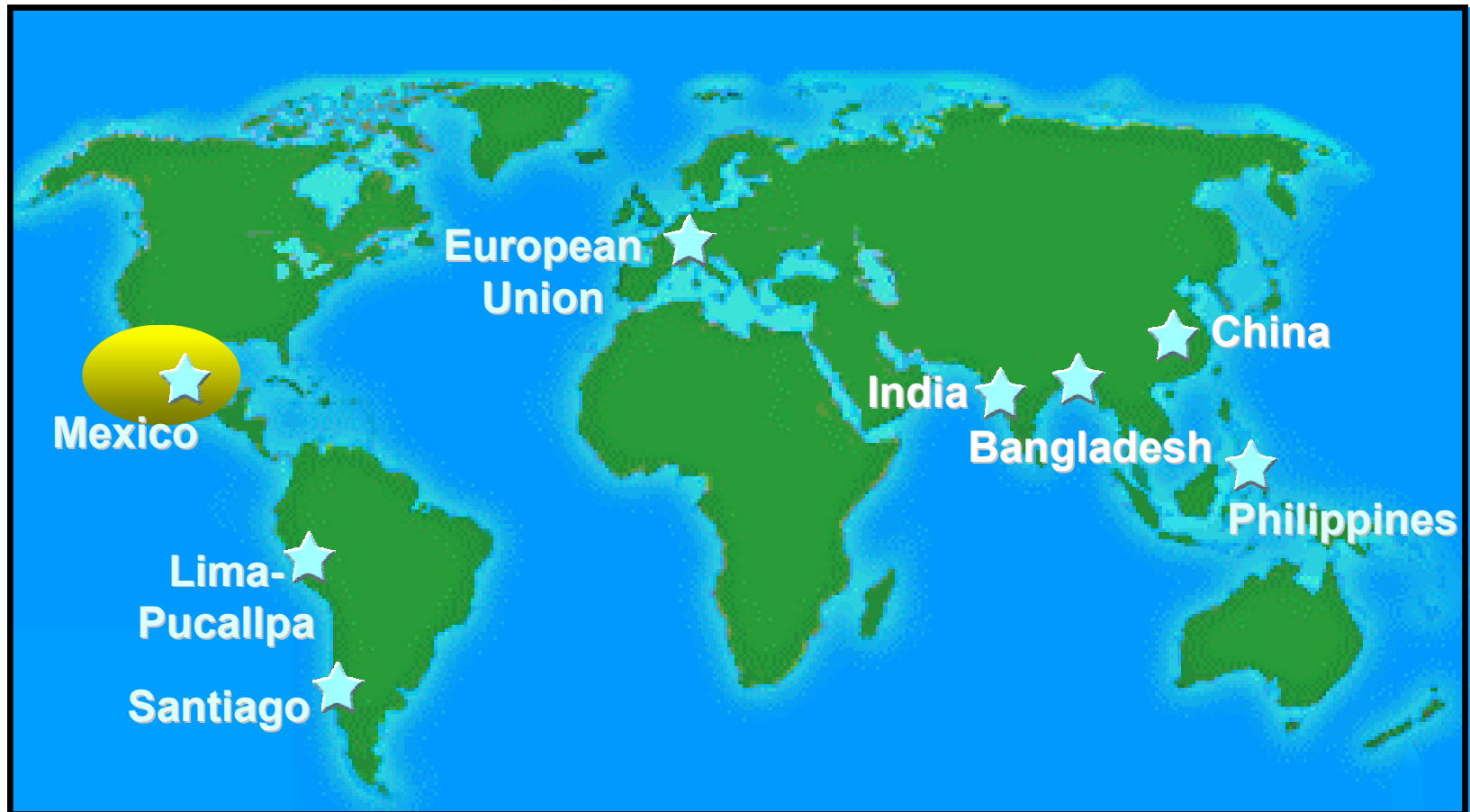
- Form a Coalition and Hold Stakeholder Meetings
- Appoint a Coordinator Serves as Executive Director of the Coalition
- Establish Stakeholder Commitments Individual stakeholders specify their commitments
- Develop a Program Plan Assess current AFV market
- Celebrate Membership
- Implement Program Plan





Clean Cities Activity Around the World

★ Current CCI Activity





Lessons Learned from Bangladesh

The project is heavily funded but the foundation was not laid first.

- Funding received/stations built/vehicles converted
- Stakeholders realized the following
 - No Codes and Standards in place-*safety issues may arise*
 - No emission testing in place-*vehicles not necessarily "clean"*
 - No cylinder inspections are in place-*safety issues may arise*
 - No training for mechanics, converters or station installation-*quality of work is poor*
 - Equipment purchased was older technology-*reliability issues, long fueling lines*

The best time to put all of the above in place are ***before*** the funding is released and there is a frenzy to install equipment.



2004 Clean Cities Conference

American Fuels for American Transportation

- Featuring the largest AFV exhibition in the world
- Presentations made by more than 100 policy experts and product manufacturers
- Emphasis on developing partnerships with international markets
- Experts addressing the role of alternative fuels in the transition to a hydrogen economy



**10th National Clean Cities
Conference and Expo
May 2-4, 2004**

Celebrating a Decade of Drive



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Partners

National Alternative Fuels Training
Center <http://naftp.nrcce.wvu.edu>

Propane Vehicle Association

www.propanevehicle.org

Natural Gas Vehicle Institute

www.ngvi.com

Gas Technology Institute

www.gastechnology.org

International Association of Natural
Gas Vehicles www.iangv.org

Natural Gas Vehicle Coalition

www.ngvc.org

Electric Drive Transportation

Association www.evaa.org